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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
CHU, KIM KWOK	

ART UNIT	PAPER NUMBER
2627	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/076,602	SASAKI ET AL.	
	Examiner	Art Unit	
	Kim-Kwok CHU	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 June 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Response to Remarks

1. Applicant's Remarks filed on June 26, 2006 has been fully considered.

Claims 1, 3, 4, 6 and 7 are rejected with U.S.C. § 102 (e) in this Office Action instead of U.S.C. § 103 (a) as in last Office Action. The objected Claims 9 and 10 which contain allowable subject matter are rejected now.

With respect to the instant Claim 1, Applicant states that the prior art of Ko's maximum transmission rate is not being disclosed with an information recording apparatus specified by identification information and therefore, the maximum transmission rate is not recording parameter information for an information recording apparatus (page 3 of the Remarks, lines 11 and 13). Accordingly, the prior art of Ko's Fig. 12 illustrates that information such as maximum transmission rate, types and versions of the specifications, disc size, disc structure etc. are stored (column 10, lines 37-42) in the lead-in area of the disc. These information provide an essential character of the disc so that the information recording apparatus can format the disc and performs information recording/reproducing operations based on the provided information. Therefore, such information can be considered as identification information in the sense of recording parameters of the disc to an information recording apparatus. Furthermore, these information is made during the

time of manufacturing (preparing, formatting) the recording medium because the lead-in area is a restricted area to the disc users.

On the other hand, Ko's maximum transmission rate is a parameter for indicating a recording speed to the information recording apparatus. This parameter is claimed in Applicant's claim 2, as a first recording speed and a second recording speed.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

> *A person shall be entitled to a patent unless -*
> *(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.*

3. Claims 1, 3, 4, 6, and 7 are rejected under 35 U.S.C. § 102(e) as being anticipated by Ko et al. (U.S. Patent 6,724,705).

Ko teaches a recording medium having all of the elements and means as recited in claims 1, 3, 4, 6 and 7. For example, Ko teaches the following:

(a) With respect to Claim 1, the recording medium on which information is to be recorded by an information recording apparatus (Fig. 10; information recording apparatus such as a disc drive or a read/write head is an inherent feature); the information is recorded at the time of manufacturing the recording medium in advance (Figs. 10, 11 and 12; column 10, lines 30-42; disc formatting parameters are recorded during the manufacture of the medium); identification information for identification information for identifying the information recording apparatus for recording the information onto the recording medium (Figs. 10, 11 and 12; column 10, lines 30-42;

information such as maximum transmission rate, types and versions of the specifications, disc size, disc structure etc. are identification information so that the information recording apparatus can format the disc and performs information recording/reproducing operations based on the provided information); recording parameter information containing optimizing information for optimizing a recording state in the record processing executed by the information recording apparatus specified by the identification information (Figs. 10-12; column 10, lines 37-42; transmission rate is one of the disc optimization parameters).

(b) With respect to Claim 3, the recording medium comprises an information recording area (lead-in area) where the information is to be recorded (Fig. 2); the recording medium comprises a control information recording area (control data zone) where recording control information used for controlling the record processing is to be recorded (Figs. 11 and 12; column 10, lines 37-42); the identification being recorded in the control information area in advance (Figs. 11 and 12; control data zone includes physical format information which is recorded in advance).

(c) With respect to Claim 4, the recording medium having standard recording parameter information (disc type and specification) is further recorded for executing the record

processing in a standard recording state (Figs 11 and 12; column 10, lines 37-42).

(d) With respect to Claim 6, a plurality of sets (multiple flags) comprising the identification information and the recording parameter information which are in a corresponding relation are recorded (Fig. 8).

(e) With as in claim 7, the record processing is a record processing executed optically, and the recording parameter information (disc type, transmission rate) is a recording parameter information for optimizing a shape of a recording pit formed on the recording medium by executing the record processing (Figs. 10-12).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 2 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Ko et al. (U.S. Patent 6,724,705) in view of Takeshita (U.S. Patent 6,556,524).

Ko teaches a recording medium very similar to that of the present invention. However, Ko does not teach the following:

(a) With respect to Claim 2, the recording parameter information comprises at least: first recording parameter used when executing the record processing with a first recording speed; and second recording parameter used when executing the record processing with a second recording speed which is faster than the first recording speed.

Takeshita teaches that speed parameters of various speeds are recorded in PCA or PMA area of a recording medium (column 10, lines 35-57).

To eliminate repetitive test procedures, optimal control data of an optical reproducing/recording apparatus can be stored on a recording medium for access during loading of the medium. For example, it would have been obvious to one of ordinary skill in the art to store the speed parameters of Takeshita in Ko's PCA area in the recording medium, because optimal operating speeds of reading/writing the recording medium itself can be loaded to the optical apparatus without running a speed test.

6. Claim 5 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Ko et al. (U.S. Patent 6,724,705) in view of Yonemitsu et al. (U.S. Patent 5,592,450).

Ko teaches a recording medium very similar to that of the present invention. However, Ko does not teach the following:

(a) With respect to Claim 5, the identification information and the identical recording parameter information are recorded repeatedly.

Yonemitsu teaches the following:

(a) identifying information (TOC data) is redundantly recorded in the re-recordable data zones of the lead-in and lead-out areas (Fig. 4B; column 11, lines 41 and 42).

Data such as disc management information stored in a recording medium can be corrupted. To ensure these management information can be retrieved while loading the disc, it would

have been obvious to one of ordinary skill in the art to duplicate the disc management information stored in the Lead-in area such as both Ko's and Weiler's similar to Yonemitsu's, because the additional copy of disc management information in the Lead-in area prevents the accidental damage of the original copy.

7. Claims 8-13 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Ko et al. (U.S. Patent 6,724,705) in view of Weiler et al. (U.S. Patent 6,725,205).

8. Ko teaches a recording medium very similar to that of the present invention as in Claims 8-10. For example, For example, Ko teaches the following:

(a) With respect to Claim 8, an information recording apparatus for executing the record processing onto a recording medium on which information is to be recorded by the information recording apparatus (Fig. 6A; accessing the information stored on a recording medium); the information is recorded at the time of manufacturing the recording medium in advance (Figs. 10, 11 and 12; column 10, lines 30-42; disc formatting parameters are recorded during the manufacture of the medium); the recorded information in include identification information for identifying the information recording apparatus for recording

the information onto the recording medium (Figs. 10, 11 and 12; column 10, lines 30-42; information such as maximum transmission rate, types and versions of the specifications, disc size, disc structure etc. are identification information so that the information recording apparatus can format the disc and performs information recording/reproducing operations based on the provided information); the recorded information include recording parameter information containing optimizing information for optimizing a recording state in the record processing executed by the information recording apparatus specified by the identification information (Figs. 10-12; column 10, lines 37-42. transmission rate is one of the disc optimization parameters).

However, Ko does not teach the following pre-recorded information in his recording medium:

(i) With respect to Claim 8, a storage device for storing the identification information for identifying the information recording apparatus;

(ii) With respect to Claim 8, a detection device for detecting the identification information and the recording parameter information from the recording medium prior to the recording of the information;

(iii) With respect to Claim 8, a comparison device for comparing the detected identification information to the stored identification information; and

(iv) With respect to Claim 8, a recording device for recording the information onto the recording medium when the detected information coincides with the stored identification information.

Weiler teaches the following disc authentication operation:

(i) a storage device for storing the identification information for identifying the information recording apparatus (Figs. 1 and 3; identification data is stored in the software disk and the hard disk);

(ii) a detection device (read) for detecting (reading/accessing) the identification information and the recording parameter information from the recording medium prior to the recording of the information (Figs. 1 and 3; step 94);

(iii) a comparison device for comparing the detected identification information to the stored identification information (Figs. 1 and 3; step 94); and

(iv) a recording device (write) for recording the information when the detected information coincides with the stored identification information (Figs. 1 and 3; software can be installed if the correct recording device is determined with the assigned serial number).

Although Ko does not teach recording and reproducing information with a storage device, a detection device, comparison device and a recording device. However, for accessing data in a recording medium, it would have been obvious to one of ordinary skill in the art to read/write Ko's data by utilizing above means as Weiler's Figs. 1 and 3, because input and output data into Ko's recording medium requires a storage device for holding the data, a detector for receiving the stored data, a comparison means for recognizing the stored data and a recording means for storing data on the medium.

(b) With respect to Claim 9, Ko further teaches that a type-corresponding recording parameter information storage device (Fig. 6A; a type-corresponding device is used to execute type-corresponding processes) for storing type-corresponding recording parameter information (lead-in information) as the recording parameter information corresponding to a type of the recording medium, wherein if the detected identification information (disc test) does not coincide with the stored identification information, the storage device records the information onto the recording medium by the use of the stored type-corresponding recording parameter information (Fig. 6A; column 4, lines 46-50; disc test information is not a standard recording parameter and it is stored as a recording parameter for the disc manufacturer).

(c) With respect to Claim 10, Ko further teaches that the information recording apparatus comprises a standard recording parameter information storage device for detecting/storing standard recording parameter information for executing the record processing in a standard recording state (Fig. 6A), wherein if the detected identification information (disc test) does not coincide with the stored identification information, the storage device records the information onto the recording medium by the use of the stored standard recording parameter information (Fig. 6A; column 4, lines 46-50; disc test information is not a standard recording parameter and it is stored as a recording parameter for the disc manufacturer).

9. Method claim 11 drawn to the method of using the corresponding apparatus claimed in claim 8. Therefore, method claim 11 corresponds to apparatus claim 8 and is rejected for the same reasons of anticipation as used above.

10. Claims 12 and 13 have limitations similar to those treated in the above rejection, and are met by the reference as discussed above.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Irie et al. (7,061,850) is pertinent because Irie teaches a recording medium having recording parameters.

Maeda (6,072,759) is pertinent because Maeda teaches a recording medium having recording parameters.

Sugimoto (5,978,322) is pertinent because Sugimoto teaches a recording medium having a parameter for identifying the medium.

12. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Kim CHU whose telephone number is (571) 272-7585 between 9:30 am to 6:00 pm, Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch, can be reached on (57) 272-7589.

The fax number for the organization where this application or proceeding is assigned is (571) 273-8300

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished application is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9191 (toll free).

Kim-Kwok CHU

KC 9/8/06

Examiner AU2627
September 8, 2006

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